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- **Kobashi, Kenji**
Toyota-shi, Aichi-ken (JP)
- **Hitomi, Yoshinori**
Toyota-shi, Aichi-ken (JP)

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(71) Applicant: **TOYOTA JIDOSHA KABUSHIKI**
KAISHA
Aichi-ken (JP)

(74) Representative:
Ben-Nathan, Laurence Albert et al
Urquhart-Dykes & Lord
91 Wimpole Street
London W1M 8AH (GB)

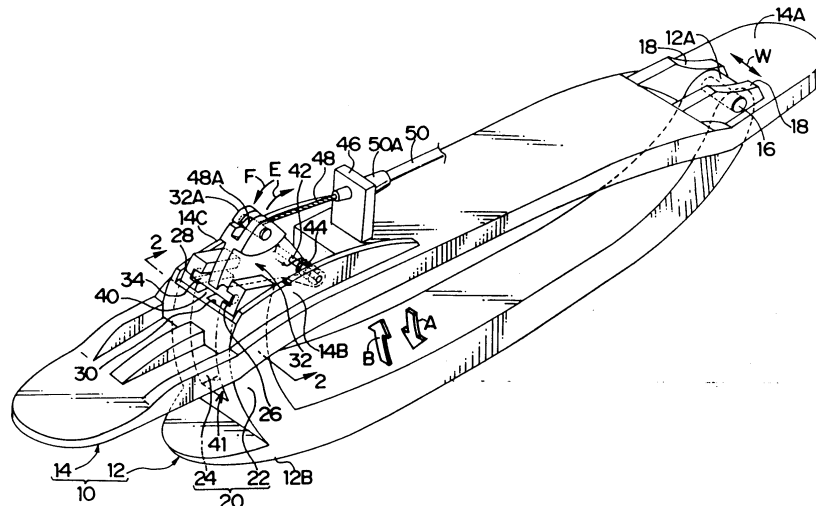
(72) Inventors:
• **Okada, Shinji**
Toyota-shi, Aichi-ken (JP)

(54) **Automobile door handle**

(57) There is provided an automobile door handle (10) comprising: a handle grip (12) including a rotating shaft portion (16) formed at one end of the handle grip (12), and a handle sliding portion (20) formed at another end of the handle grip (12) and having an engaged portion (26,28); a handle case (14) including a rotating shaft mounting portion (18) in which the rotating shaft portion (16) is rotatably mounted, and a slide hole (30) in which the handle sliding portion (20) is inserted; and a lever

(32) including a wire connecting portion (32A) to which a wire (48) connected to a door lock releasing mechanism is connected, and an engaging portion engaged with the engaged portion (26,28), the lever (32) being rotatably supported by the handle case (14), in which a reinforcing portion is provided within the slide hole (30) and a recessed portion is provided in the handle sliding portion (20) to prevent the handle sliding portion (20) and the reinforcing portion from interfering with each other.

FIG. 1





European Patent
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EUROPEAN SEARCH REPORT

Application Number
EP 97 30 1751

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
A	DE 30 30 519 A (DAIMLER BENZ AG) 18 February 1982 * page 8, line 16 - page 10, line 13; figures 1-3 *	1	E05B7/00
A	DE 295 12 095 U (KIEKERT AG) 5 October 1995 * page 4, line 14 - page 5, line 29; figure *	1	
A	PATENT ABSTRACTS OF JAPAN vol. 096, no. 003, 29 March 1996 & JP 07 305539 A (MITSUI MINING & SMELTING CO LTD), 21 November 1995 * abstract *	1	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			E05B
Place of search	Date of completion of the search	Examiner	
THE HAGUE	26 March 1999	Pieracci, A	
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 97 30 1751

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
DE 3030519 A	18-02-1982	NONE	
DE 29512095 U	05-10-1995	NONE	

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82